

electromagnetic or optical signals that carry digital data streams representing various types of information.

Network link 320 typically provides data communication through one or more networks to other data devices. For example, network link 320 may provide a connection through local network 322 to a host computer 324 or to data equipment operated by an Internet Service Provider (ISP) 326. ISP 326 in turn provides data communication services through the world wide packet data communication network now commonly referred to as the "Internet" 328. Local network 322 and Internet 328 both use electrical, electromagnetic or optical signals that carry digital data streams. The signals through the various networks and the signals on network link 320 and through communication interface 318, which carry the digital data to and from computer system 300, are exemplary forms of carrier waves transporting the information.

Computer system 300 can send messages and receive data, including program code, through the network(s), network link 320 and communication interface 318. In the Internet example, a server 330 might transmit a requested code for an application program through Internet 328, ISP 326, local network 322 and communication interface 318. In accordance with the invention, one such downloaded application implements the techniques described herein.

The received code may be executed by processor 304 as it is received, and/or stored in storage device 310, or other non-volatile storage for later execution. In this manner, computer system 300 may obtain application code in the form of a carrier wave.

In the Claims:

Please amend Claims 1 and 8 as indicated.

(Amended) A method of executing an operation on a set of objects, the method comprising the computer-implemented steps of:

detecting that a statement contains

an operation identifier that specifies an operation,

5 pattern matching criteria, and
6 an attribute identifier that identifies an attribute; and
7 executing said statement by
8 identifying all objects associated with identifiers that satisfy said pattern
9 matching criteria, and
10 performing said operation on said attribute of each of said objects that satisfy
11 said pattern matching criteria.

8. (Amended) A method of executing an operation on collections of objects, the method
comprising the computer-implemented steps of:
detecting that a statement contains
an operation identifier that specifies said operation,
an identifier that is associated with a collection of objects, and
an attribute identifier that identifies an attribute of a member object of said
collection of objects; and
executing said statement by
identifying member objects of said collection of objects, and
performing said operation on said attribute of each of said identified member
objects.

In the Drawings:

A proposed drawing change is submitted for FIG. 2, which adds the reference number "224". A hierarchy pattern identifier 224 is described in the specification as originally filed (page 15, lines 11-23). Therefore, no new matter is introduced to the application through the proposed change to the FIG. 2 drawing.